SMIC

SMIC CSR REPORT 2021

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Senju Metal Industry Group CSR Report

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SMIC

LOOK AT THE WORLD

Photo: Kinugaoka Factory, Tochigi Segment

EDITORIAL POLICY

SMIC Group strives to report on key challenges and topics of high social importance in order to determine materiality. We declare that this report was made in compliance with the requirements of the GRI standards, and reports the results of our efforts to solve social problems through our business.

Period Covered	April 1, 2020 - March 31, 2021 (Includes some information from April 2021 onwards)
Report Scope	25 group companies (includes non-consolidated subsidiaries and associated companies). Note that SMIC's environmental initiatives are listed separately.
Key Changes	Decrease in consolidated subsidiaries: 2 companies
Membership	RBA, JWES, JIEP, JAPIA, TEA, JCCI
Publication History	Current Issue: October 2021 (Previous Issue: October 2020)
Next Issue	October, 2022
Reference Guidelines	GRI Standards, Environmental Reporting Guidelines, ISO26000 *The GRI standards comparison table will be posted on our CSR website.

CONTENTS

Message from the President

Execute
The Power to Perform - Fighting Spirit

–What we want to achieve to welcome in a new era–

MANAGEMENT PHILOSOPHY

Perform our mission as a socially valued institution via providing universally beneficial products

"Company" is a place where all employees share core values and are able to use the lines of communication as a "dojo" for the mastery of oneself. It is our strongest desire that company growth is directly interwoven with employee happiness – materially and spiritually. In the face of modern society, as the foundation of a company's existence, we are expected to continue to provide universally beneficial products year after year. Our management philosophy is to harmonize societal goals with employee desires, thereby enabling our mission to be a valued institution sharing peace, happiness and progress to all of society.

Three key pillars are necessary under this philosophy in order to advance company development and ensure the success of our mission: Ability, Integrity and a Fighting Spirit. These pillars are the three sacred treasures that form the cornerstones of every aspect of life.

When these pillars are indomitable inside our institution, a bright, peaceful and vigorous workplace will naturally emerge. We are confident that with this workplace as a driving force we will overcome any challenges and the company will continue to grow as long as this pioneering spirit is encouraged each and every single day. Together, let's take this philosophy to heart and embrace it as our belief, and build a bridge of peace and friendship across the entire corporate landscape while progressing into joyful, healthy lives.

Published in June 1960

The late Mr. Senju Sato, Honorary Chairman

As President	June, 1960 - June, 1978
As Chairman	July, 1978 - May, 2008
As Honorary Chairman	June, 2008 - October, 2008

Four things SMIC wants to achieve to bring about a sustainable society

It is my pleasure to introduce the SMIC CSR Report 2021.

Day by day, it is increasingly critical that a company conducts its business activities based on the SDGs (Sustainable Development Goals) and ESG (Environment, Society, Governance) to help realize a sustainable society. We have listened to our stakeholders' expectations and requests for us to do so. We aim to meet these expectations and requests with our management philosophy *Ability, Integrity and Fighting Spirit* (trying to solve difficult problems and overcoming any challenges), the SMIC Group set the theme of this year's CSR report as *Execute the power to perform - fighting spirit – What we want to achieve to welcome in a new era.*

We will make a social contribution by achieving the following four objectives to welcome in a new era.

1. Establishment of BCP (Business Continuity Plans)
2. Realization of carbon neutral business
3. Promotion of low-temperature solder
4. Promotion of highly reliable solder

First, as for the establishment of BCP, we will strengthen our system that enables us to continue business activities even under extreme circumstances. They include outbreaks of infectious disease, such as COVID-19 which has been rampant globally since last year and natural disasters such as earthquakes and typhoons. We can achieve this by taking various measures such as decentralizing our sales, research, and management offices in addition to dispersing our productions sites.

Second, as for the realization of a carbon neutral business, we will actualize a sustainable production system that enables effective utilization of mineral resources and reduction of greenhouse gas simultaneously by promoting energy conservation in solder production and solder recycling.

Third, as for the promotion of low-temperature solder, we will develop and offer a solder that enables users to work at a lower temperature than before, reducing electricity use. We will also develop soldering equipment that controls temperature differences within the circuit, greatly reducing nitrogen usage, cutting power consumption, and greatly improving flux collection.

Fourth, as for the promotion of highly-reliable solder, we will develop and offer solder that is effective in various environments to realize Society 5.0 where *No one will be left behind, save the lives that can be saved, live with a sense of vitality,* and everything will be connected online using 5G, IoT, and automated operations.

Achieving these four objectives will bear further investment and business continuity, which will lead to the growth of our company. We believe it important to perform our mission as a socially valued institution and to achieve a sustainable society.

The SMIC Group that meets varied customer needs

Industrial Analysis Service, our group company, celebrates its 50th anniversary in February next year. It was established in 1972 and conducts an analysis of non-ferrous metals including solder, environmental analysis of soil and water quality, an analysis of regulated materials such as RoHS / REACH and phthalates. As a new analysis business, the Industrial Analysis Service has begun analysis of specific component structures for the purpose of assisting our customers' development by utilizing orbitrap, cutting-edge analysis equipment. We will continue to introduce new analysis facilities aiming to realize the development in analysis that our customers expect.

We will continue business activities to meet the needs of stakeholders including our customers and to achieve a sustainable society. I humbly request your continued support and encouragement in this endeavor.

President **RYOICHI SUZUKI**

SMIC Group: Our Vision and CSR

SMIC engages in CSR and corporate activities aimed at being an outstanding company that helps to realize a sustainable environment, society, and governance, based on our Management Philosophy, by maintaining sincere relationships with our stakeholders. We value the 5 aspects defined in the code of conduct of the RBA (Responsible Business Alliance), and the following four-step process was recommended by the GRI (Global Reporting Initiative) for identifying critical issues, prioritizing events to achieve a better society together with stakeholders, and realizing the society envisioned through our activities.

Growth of the Company and Employees Contributing to customer satisfaction and a better society

PROGRESSION OF OUR ENTIRE SOCIETY

CUSTOMERS
- Provide safe, secure, and stable products and services
- Provide proper eco-friendly products/services and information

LOCAL COMMUNITIES
- Prevent accidents/disasters at business sites and provide disaster support in surrounding areas
- Respect local cultures/customs and contribute to local communities

GLOBAL ENVIRONMENT
- Prevent global warming and reduce waste
- Discontinue use of conflict minerals and control chemical emissions

SMIC

SUPPLIERS
- Fairly select and conduct transactions with suppliers
- Maintain corporate value and support socially responsible investment

EMPLOYEES
- Fairly evaluate, treat, train, and fulfill talent allocation
- Consider occupational safety and both mental and physical health

MANAGEMENT PHILOSOPHY

SMIC Group's focused SDGs items

SUSTAINABLE DEVELOPMENT GOALS

As a company that provides metal for products and services that form the infrastructure of society, we SMIC aims to contribute to the achievement of the SDGs by positioning the following six SDGs as our focus that are deeply interwoven with our business activities.

step 1 Identification of key issues and events
- GRI aspects and important RBA self-audit items
- Identification of the scope of impact

step 2 Prioritization
- Severity assessment for stakeholders and the company
- Qualitative and quantitative assessment in the monthly CSR meeting
- Planning of ESG management strategy

step 3 Validation
- Assessment of the scope, impact and period of GRI items
- Approval and disclosure by the management team

step 4 Review
- Distribution and disclosure of documents in hard and soft copy (Japanese, English, and Chinese versions)
- Analysis and summary of opinions in the monthly CSR meeting for utilizing in future meetings

SMIC Group Lifestyle Support Products

SMIC Group's products are used everywhere and support every part of our lives, including everyday products such as electronic devices and mobility products, as well as infrastructure such as wind turbines, base stations, steel towers, and even satellites. SMIC Group will continue to pioneer the future of bonding through total solutions, and thus contribute to society.

SOLDERING EQUIPMENT

SMIC soldering equipment is used for the soldering mounting process of printed circuit boards and electronic components in manufacturer factories.

MATERIAL ANALYSIS INSPECTIONS

Industrial Analysis Service does analysis inspections of harmful substances contained in various materials and products.

BALL SOLDER, PASTE SOLDER

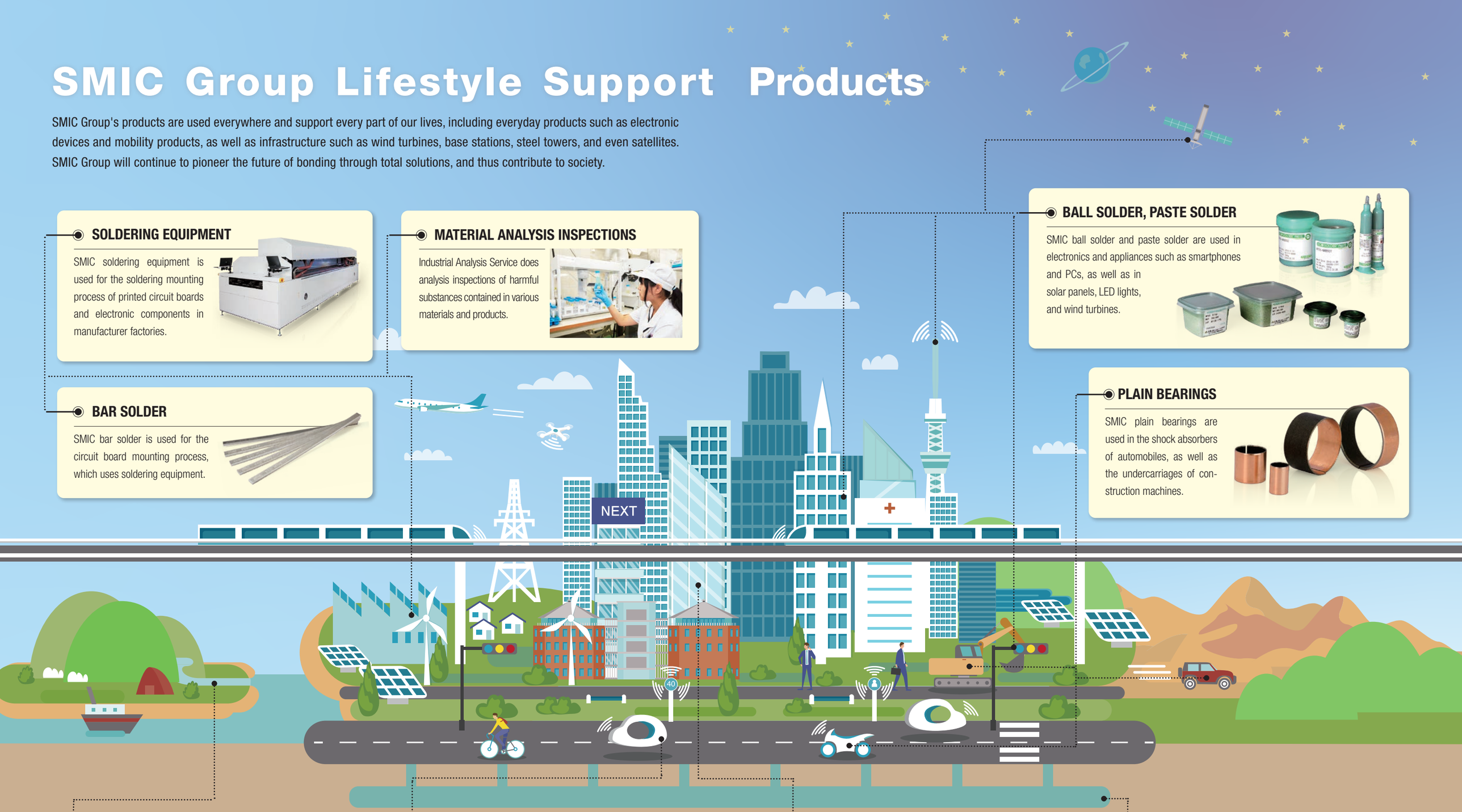
SMIC ball solder and paste solder are used in electronics and appliances such as smartphones and PCs, as well as in solar panels, LED lights, and wind turbines.

BAR SOLDER

SMIC bar solder is used for the circuit board mounting process, which uses soldering equipment.

PLAIN BEARINGS

SMIC plain bearings are used in the shock absorbers of automobiles, as well as the undercarriages of construction machines.



ENVIRONMENTAL ANALYSIS INSPECTIONS

Industrial Analysis Service does analysis inspections of contaminants in water, air, and soil.

PREFORMED SOLDER

SMIC preformed solder are used for in-vehicle mounting in automobiles.

SPRINKLERS

Senju Sprinkler's fire sprinklers are used in firefighting equipment around the world, including housing, buildings, underground parking lots, and public facilities.

SPECIAL ALLOYS

SMIC zinc/tin/magnesium alloy is used for anti-corrosion surface treatment of cast iron water pipes.

TOPICS 1

Footsteps of SMIC Group's environmentally compatible products

May Mother Earth have eternal life. Passing the torch to the next generation. We hope to welcome in a new era with you.

SMIC always develop environmentally compatible products in line with the social trend toward environmental footprint reduction based on our management philosophy "perform our mission as a socially valued institution via providing universally beneficial products." SMIC will continue to develop and offer to the world environmentally friendly products that can produce new value and contribute to a sustainable society that the world desires to welcome a new era for the next generation.

Social Trend Toward Environmental Footprint Reduction

1985 Vienna Convention

1987 Montreal Protocol

1988 The law concerning the protection of the ozone layer through the control of specified substances and other measures.

2003 The restriction of hazardous substances

2008 Dioxin suppression movement in the electronic industry

2015 Paris Agreement

2021

Non-washing solder

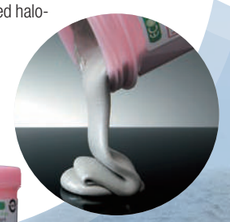
After soldering, left over flux was washed away with freon. In the 1980s, it gradually became known that ozone depletion by freon reduces the ozone layers ability to block hazardous ultraviolet light and is harmful to humans. As a countermeasure, the solder industry promoted the development of non-washing solders that did not use freon. SMIC started with non-washing pate solder in conformity with the US MIL standard, non-washing tar solder, and non-washing flux. This established the basis of today's environmentally friendly solder products.

Lead-free solder

In the past, tin and lead solder were widely used, but as lead is detrimental for both the environment and human health, leading to lead-free solder being developed in the late 1980s. The Japan Electronics and Information Technology Industries Association (JEITA) led the movement in Japan and a national project began. Lead-free Sn-Ag-Cu solder was adopted as a composite with prominent total balance. SMIC released "M705" as its product name to the market in 2001. Today, partly because we made it widely available through our patents, it has become an industry-standard lead-free solder widely used around the world.

Halogen-free solder

Previously, printed circuits contained halogen due to its fire-resistant qualities, but when it was discarded and burnt, it generated dioxin and was harmful to both humans and the environment. As a result, we shifted to halogen-free printed circuits. Along with this development, the movement to use halogen-free electronic components / materials including solder were accelerated. SMIC has also developed halogen-free flux materials and offered halogen-free products.



Low-temperature solder to realize energy conservation

Since the Paris Agreement was adopted in 2015 that stipulated international cooperation to mitigate climate change, development and dissemination of energy conservation / low carbon products globally have been accelerated. Last year, the Japanese government announced its policy to aim for a decarbonized society by 2050. SMIC developed low-temperature solder that had a lower fusion point than generally used lead-free Sn-Ag-Cu solder. Because SMIC's low-temperature solder can be used for soldering at temperatures nearly 50°C lower than regular lead-free Sn-Ag-Cu solder, through this power consumption can be reduced by nearly 60%. SMIC has been continuing to develop products that contribute to decarbonizing manufacturing.

Soldering equipment to reduce power consumption

A new type of Nitrogen Atmosphere Reflow Soldering Furnace developed by SMIC introduced a heat circulation system in a new oven, realized the control of temperature differences within the circuit, greatly reduced nitrogen usage and power consumption, and significantly improved flux collection, therefore reducing power consumption by over 20%.

What we want to achieve to welcome in a new era

We cooperated with Lenovo Japan, LLC in the development of low-temperature solder and Lenovo's LTS (Low Temperature Solder) process. We welcomed Mr. Tadashi Kosuga, Executive Director of Lenovo Japan, LLC and had a discussion with Masato Shimamura, Councilor of Senju Metal Industry Co., Ltd. and General Manager of R&D Engineering Division, Solder Technical Center, about what we wanted to achieve to welcome in a new era.

Overcome risks and create a new trend

Moderator: The theme of this year's CSR report is *Execute the power to perform - fighting spirit.* What do you want to achieve and to welcome in a new era with initiatives, such as the SDGs, Society5.0, and a sustainable society?

Kosuga: Nowadays, every company emphasizes the importance of ESG or the SDGs. We make efforts every day to develop new products considering the challenge of how we can appeal to ESG. In fact, at Lenovo, we started manufacturing in consideration of ESG early on. Now, I belong to the commercial department, but we collaborated with SMIC from around 2012 on the joint development of low-temperature solder. Mr. Shimamura joined that project, and I really appreciate his help. In 2016, Lenovo started mass production of ThinkPad using low-temperature solder, and we have already shipped out the accumulated total of 38 million PCs to the market to date. By using SMT(*1) method which has an extremely high CO_2 reduction effect, Lenovo's LTS process(*2) using the low-temperature paste realized about 7.5t of annual CO_2 reduction, which makes our customers very happy.

This is the collaboratively developed product between SMIC's low-temperature solder and the Lenovo's LTS process in the PC industry including cell phones and servers that puts us ahead of our rivals around the world. It is a big selling point.

Now, we are working on taking advantage of low temperature soldering for sub-systems such as memory modules, camera modules, and wireless cards. The Lenovo's LTS process produced in collaboration with SMIC and using low-temperature solder received the Gartner best6 supply chain breakthrough award in 2020, and we have already shipped out 41.1 million systems based on our process. We received positive feedback from our customers that they had less malfunctions because of the low temperature at the time of production.

***1 SMT :** Surface Mount Technology
***2 Lenovo's LTS process :** Lenovo's Low Temperature Solder Process

From now on, we will promote the recycling of the plastic parts of ThinkPad and packaging materials.

Moderator: I believe you collaborate with various companies. What do you ask of partner companies?

Kosuga: ThinkPad is our notebook PC brand. I believe it is very important to have a brand image of high quality, high reliability, and robustness. For example, as for robustness, we had been worried about the fragility of low-temperature solder and recycling plastic at the beginning of development, but along with the partner companies, we improved our process and solved the problems. In this way, one of the most important features when we select our partner companies is whether they are ready to collaborate with us and make efforts to solve problems together.

Shimamura: Low-temperature soldering using tin and bismuth is a technique known to us from early times, but, as Mr. Kosuga mentioned, fragility of joints was its weakness. In the electronics industry, in fact, it was difficult to make a smooth transition from traditional solder to new types. Lenovo overcame qualitative risk and succeeded in developing low-temperature soldering. Lenovo created a new trend, which was a major achievement.

As a supplier, we were fortunate to collaborate with Lenovo. It was a large-scale, worthwhile project. In the future, it is expected that parts other than solder and materials may turn themselves into those fit for low temperatures. In that case, we may face new challenges that are still invisible. Even if we face such a problem, I hope we maintain partners that can overcome new challenges.

Moderator: I believe Lenovo as a set manufacturer makes products with consistently strong demands from end users. What would you like to ask of SMIC, a material manufacturer, in particular?

Kosuga: We consider it necessary to promote CO_2 reduction, aiming to achieve a carbon neutral business. For this purpose, I have a technological expectation that SMIC's low-temperature solder will lower the fusion point to be even lower than now.

Shimamura: There are two approaches to using solder materials to achieve a carbon neutral business. First, we should develop low-temperature materials with different elements or materials to lower the fusion point than the current low-temperature solder. Second, we should reduce the energy used to produce solder materials or use clean energy. Once we achieve this, as a comprehensive package, we can promise sustainability and the reduction of the burden on the environment.

Tadashi Kosuga

Lenovo Japan, LLC.
Distinguished Engineer & Executive Director,
Commercial Subsystem Development, CPSD

1987 joined IBM Japan
2005 Moved to Lenovo Japan (at present, Lenovo Japan, LLC.)
Consistently leading technological development primarily at the mass production site of electronic parts of ThinkPad, a PC product. Recently, primarily responsible for making Lenovo's LTS, a new technology, an industry standard.

Masato Shimamura

Senju Metal Industry Co., Ltd.
Councilor / General Manager of Solder Technical Center,
After serving as President of Senju Comtek Corp. (the U.S.),
2018 appointed as General Manager of Solder Technical Center
2020 appointed as Councilor of Senju Metal Industry Co., Ltd.

The key to recycling is collecting used products.

Moderator: It is very important for any industry to pay attention to the environment including the CO_2 reduction. What does Lenovo think about its attention to environment?

Kosuga: For example, as for plastic materials, in cooperation with other manufacturers in the same industry, we are promoting post-consumer recycling(*). It is important to improve the infrastructure because the key to a steady supply of recycling materials is to increase the collection rate of used products. In addition, there is a movement not to use plastic materials for vinyl and sealer for packing. The industry as a whole supports this movement with Lenovo as its leader. As a corporation, we strongly promote environmentally friendly, green products.

***Post-consumer recycling:**
Collect used products that had been shipped out to the market and reproduce them as commodities

Shimamura: We have been focusing on selling environmentally friendly products and selling is the end of the cycle. After customers use the products, how can we recycle them and reproduce them as commodities? How can we make recycling energy conservative and effective? These are challenges we have to tackle. Our company in cooperation with TAK-G, our affiliated company, implement recycling solder. It is extremely important to collect and sort used solder. Our company's solder combines various elements in accordance with customers' requests. It is much more effective to recycle solder-mixed metal with the same composition than extracting specific metal elements out of mixed solder. Once we can achieve such a mechanism and flow, we can provide a sustainable and less burdensome circulation of resources.

Moderator: Besides recycling, what are you working on?

Kosuga: We are starting a new approach to how our customers can contribute to being carbon neutral by using our products in the market. An example is charge optimization by the battery management system installed in the ThinkPad. If you implement rapid charge by constantly connecting a notebook PC to the power source, the amount of consumed electricity will increase, and the battery's lifespan shortens. By managing the power source so that it can be charged only when it is necessary, you can reduce electricity consumption and prolong the battery's lifespan. Our current challenge is how we can contribute to a carbon neutral society from our customers' side.

Customers' voices that will lead us to a higher level

Moderator: Today, corporations are requested to listen to various stakeholders' opinions and reflect those views in their business activities. What kind of input do you particularly listen to?

Kosuga: Our major customers are corporate users. Sometimes, we received an order for tens of thousands of items from one company. If something happens, we will receive feedback immediately. Voices from corporate users are very important. On the other hand, we cannot ignore each general user's voice. As for reading and analyzing customer's feedback after using the products through the web forum, each employee takes advantage of the network and collects feedback not only from corporate users but also from general users.

Shimamura: Solder materials have a very broad platform and our customers' fields are varied. It is indispensable to listen to our customers' feedback and requests to get their attention to find value in our materials. Nevertheless, many requests are concerning operability, quality, and costs. There are very few customers who take a risk but place top priority on the social and environmental sustainability. Lenovo is a rare exception. Technology and know-how fostered in such new challenges will be gradually supplied to the platform, which will change the global tide. I feel it is extremely important to listen to customers' requests not only from the perspective of immediate technological improvement or simple profitability but also from a perspective that they make us face essential problems in society and lead us to a higher stage.

Something you should challenge and take a risk for

Moderator: Today, the manufacturing front lines should keep one eye on the Earth and social environment. Could you both give a message to young engineers living in such an age.

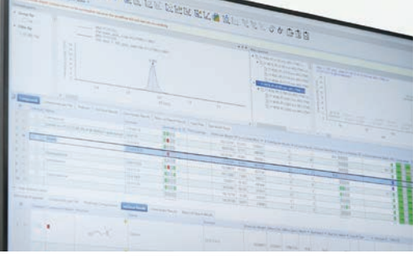
Kosuga: I have been in research and development for over 30 years since I was with IBM and learned that product development is about constantly challenging and taking risks. From that perspective, it is important to increase the probability of success by accumulating a large amount of experimental outcomes. However, the risk still remains but I take it. So I would like to suggest young engineers to gain the courage to move forward when they find something. You don't need to take the risk alone, go talk to your supervisor and find a way to face it. That's why communication is extremely important. Take a risk on a daily basis so you can move forward - risks that are in testing, outcomes, and results through verification. This way you will find your supporters within your environment through daily communication within your organization, which I believe is essential.

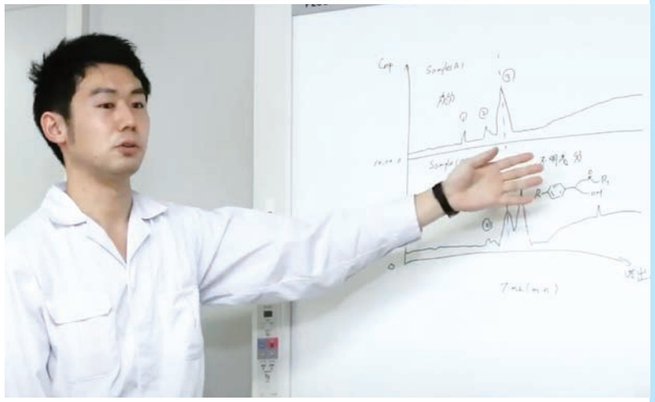
Shimamura: This is my 26th year in this company. Not only the technology and products that were new when I joined the company have become obsolete, but also things that are 5 to 10 year old may become so. This is a fast-changing world. As a result, it is not good to have a passive attitude to solve the problems presented. By grasping the psychology of the next customers and market, you should create themes in an active manner. I would like to expect that young researchers have the attitude to accomplish what they feel appropriate even if they fail. Everyday I feel it's quite important that we at the management level should adopt a management style that extracts such energy from our young engineers.

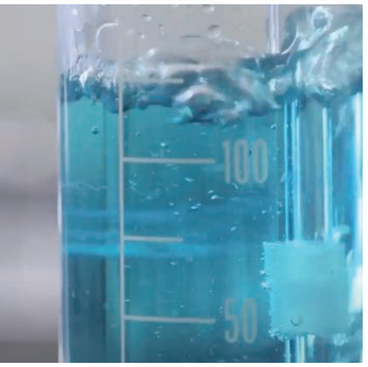
Moderator: Both of you have shown your hopes for the new era and expections of the next generation.

Shimamura: Under COVID-19, we cannot have a face-to-face meeting and can only meet online, but it was my pleasure to talk with Mr. Kosuga after a long time, and he has filled me with energy. I will save this energy, but I will not decrease my energy for development. I hope this can be used as an opportunity to move on to the next stage. Thank you.

Moderator: Thank you very much for your contribution today.







TOPICS 3

Industrial Analysis Service

Analysis to create the future

Cerebrating the 50th anniversary

Industrial Analysis Service (IAS) will have its 50th anniversary on 8 February 2022. The research department of SMIC branched off to form IAS. By applying high-level analysis technology on non-ferrous metal materials, environment, the restriction of hazardous substances that have been fostered, it will develop analysis services in new fields.

IAS
株式会社産業分析センター

History of Industrial Analysis Service

Former name
SMIC's Solder material Research department

Corporate changes →

Social changes →

1967
Basic Law for Environmental Pollution Control

1970
Start so-called "Pollution Diet"

1972
Established
non-ferrous metal analysis business
Start various environmental analysis businesses

2005
Limit on using the restriction of hazardous substances
Start material analysis business

2006
Execution of EU restriction of hazardous substances

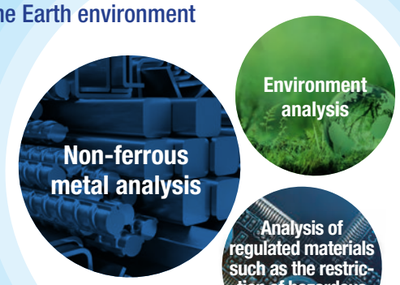
2019
Start organic substance analysis business
(Facilities installed in Japan for the first time)

2020
Start surface analysis business

Moving analysis from understanding the current situation to creating the future

Previous analysis meant primarily measuring the amount of the target material. We will broaden our analysis service to be consistently consciousness of improving at the technological level and the introduction of new analysis facilities to achieve a *sophisticated analysis of what our customers' pain points* and *analysis of a high degree of social contribution to assist research and development for corporations.*

A corporation with high quality and reliability that makes a contribution to the maintenance and prevention of polluting the Earth environment



- Empirical value fostered over 50 years
- Proper power of proposal
- Diversified equipment

Surface analysis Organic and inorganic compounds Structural analysis

Satisfying the *desire to know,* IAS can now specify the structure of components that were unknown due to our previous analysis.

Analysis using high performance analysis equipment LC/FTMS (Orbitrap)

Orbitrap is a piece of high-performance analysis equipment specialized in structural analysis of *desired components.*
IAS' previous analysis method (equipment) was limited to narrowing down the candidate components to a few hundred kinds.
By utilizing orbitrap, it is possible to specify what exactly this *desired component* is.

Unknown component

With previous analysis method: → Unable to specify

With orbitrap: → Able to specify!

What can be understood once components are specified

- Structural analysis of the components in chemicals
  → Confirmation of differences between products performance
- Structural analysis of decomposition products and impure substances
  → Investigation into the causes of failures
  → Confirmation of unintentional present components

Supporting product research and development, acquiring detailed information and specifying the causes of failure may improve production technology and lead to the development of new products.

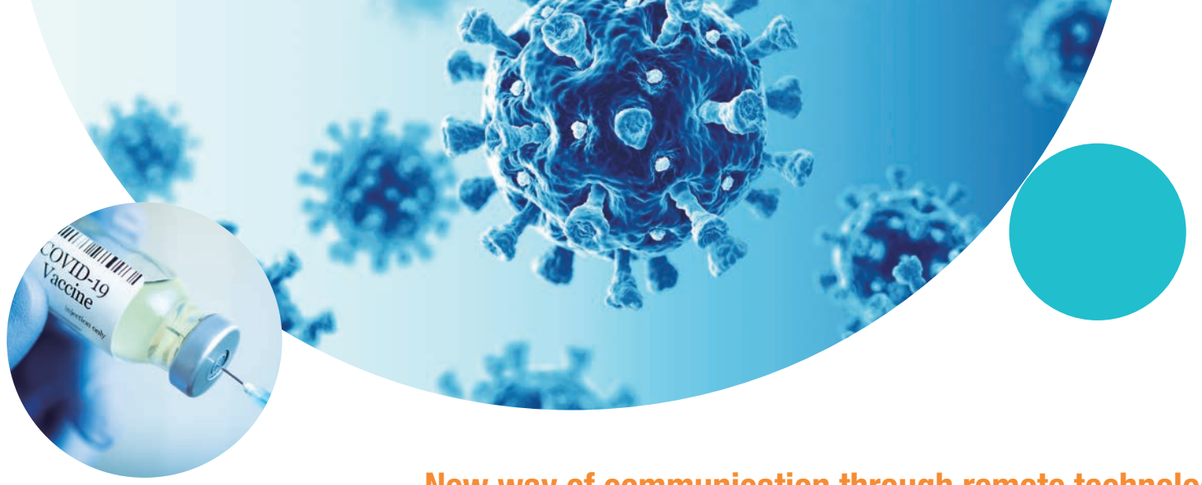
To meet further needs

We will continue to introduce cutting-edge analysis facilities based on our philosophy of **more accurate** and **faster** to continue meeting customers' need for analyses of higher accuracy and quicker delivery. At present, following orbitrap (for organic compounds), we introduce "Laser Ablation – ICP-MS" that enables **depth direction analysis** and **without pretreatment** for inorganic compounds and to apply for surface analysis.

TOPICS 4

Measures for COVID-19

Considering business continuity as a social responsibility for manufacturing companies, the SMIC Group has been promoting BCP (Business Continuity Plan) measures. Even in the COVID-19 era, we have been implementing various continuous and advancing efforts since last year to achieve business continuity based on the above philosophy.



Our system to deal with the emergence of people who tested positive for COVID-19.

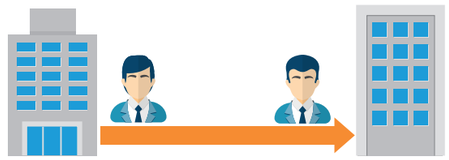
We have established guidelines and systems at the time of the emergence of people who tested positive for COVID-19 to deal with the situation swiftly. Utilizing the business continuity plans, in case of long absence of employees, we are prepared to continue to provide customers with products.

System organization chart in responce to positive COVID cases

Establishing an organization and internal decontamination team, we are doing our best to conduct a swift response and field restoration.

Establishment of a system that can continue business by introducing a group support system

This system allows the smooth distribution of the right people with the appropriate skills and techniques in the right jobs among our groups companies. We do our best to make an effective use of our skills and techniques to meet social needs and to maintain employment.



Efforts towards preventive measures

We have been taking measures to protect our employees' health and safety such as supporting early workplace vaccinations, infection prevention and maintaining social distance implemented from last year and intensifying preventive measures through the introduction of new machines.

We support vaccination by collaborating with industrial doctors.

SMIC Group made efforts to mitigate the COVID-19 infection risk in summer by providing workplace vaccination opportunities to those employees and their families who hope to get vaccinated.

We have intensified our preventive measures such as sterilization, maintenance of social distance, and movement restriction.

Introduction of non-contact instrument for measuring body temperature at the entrance

Promotion of air ventilation through CO_2 monitoring

New way of communication through remote technology

We continued smooth business operations inspite of the challenges to have in-person meetings with customers or conference with a large number of people by promoting new ways of communicating through the utilization of remote technology in various areas.

Distribution of product demonstration and experiments to customers through the live streaming system

COVID-19 forced us to change our sales methods. It was indispensable for customers to come to our company and conduct product demonstrations and experiments when we sell automated solder equipment. COVID-19 made it difficult to do so. It has now become possible to do these things remotely through the use of the live streaming system.

Remote audit through the live streaming system

As for the annual customer audits that we conduct many times during the year, it has become possible to conduct a remote audit without customers coming to our offices through the live streaming system. As for the internal audit, it has become possible to do so without moving around sites, which has led operations to be more efficient.

Promotion of telework and enhancement of split shifts

We expanded the eligibility of telework employees and strengthened the security measures of telework. We also tried to limit the negative effects in case of the emergence of staff infected with COVID-19 by enhancing the distribution of offices and the introduction of flex time.

Remote sales through web meetings

We have introduced individual separate booths to meet the increase in demand for meeting rooms.

Enhancing the distribution of offices

We distributed our sales and back-office departments between the head office, Soka segment, and Tochigi segment. In addition, we are dividing employees into groups by building and rank at each site.

Efforts to achieve a Zero-Emission society through Our Environmental Vision 2050

It is important for us that we address global environmental issues (such as global warming, acid rain, soil pollution, and water contamination) as critical issues deeply connected to the very existence of humanity, and a common mission for all of us. We will realize a zero-emission society and contribute toward building a sustainable society through our business activities.

Environmental Vision 2050

THE THREE GOALS IN SOCIETY

1 Attain A LOW CARBON SOCIETY

Taking on the challenge of building a zero-greenhouse gas society

▼

Promoting energy saving in our corporate activities

2 Attain A CYCLICAL SOCIETY

Conserving global resources through recycling

3 Attain a society that lives in HARMONY WITH NATURE

Conserving biodiversity and endeavoring to realize a society with zero-use of harmful chemicals that pose a risk to the environment

Second Environmental Plan

(FY2020 – FY2030)

Efforts towards a carbon neutral business

Reduce CO_2 emissions from level measured in FY2013 (17,328 t-CO_2) by 25% by FY2030

Promote product recycling

Develop products using 100% 3R* materials

Cut use of harmful chemical substances to zero

Zero usage of chemical substances that impact the human body or the environment

Conserve biodiversity

Conserve biodiversity through environmental conservation activities

*3R = Reduce, Reuse,Recycle

Environment

Environmental Policy

ENVIRONMENTAL PHILOSOPHY	We believe conservation of the global environment is the shared mission of all humanity. Based on our mission and with the purpose of realizing a sustainable society, we strive to harmonize our business activities with the global environment, and make every effort to protect our rich nature and diverse ecosystems.

Environmental Administration Structure

We established the Environment Committee as an organization to take measures necessary for reducing our burden on the global environment. The committee deliberates on the formulation and implementation of plans related to pollution prevention and environmental conservation. Every year at the Management Committee, we identify environmental risks and opportunities, and decide our environmental activity policies based on items identified.

Environmental Management System

We defined an environmental philosophy and environmental policy that serve as the guiding principles for environmental activities and built an environmental management system based on ISO14001, so that we can conduct PDCA. With regard to our four priority themes relating to the environment (reducing greenhouse gases, reducing waste, reducing harmful chemicals, and nature conservation activities), each site and business unit both in Japan and abroad set annual goals and action plans, and conduct activities aimed at reducing our environmental footprint.

Environmental Risk

We determine various environmental risks such as climate change problems and pollution caused by waste, sets strict voluntary administrative standards for preventing environmental accidents and pollution accidents, and takes various measures to address these in conducting business. In order to minimize damage expected in the event of an emergency, we conduct emergency response drills once per year. In FY 2020, we did not have a single environmental accident or pollution accident. We will continue to take preventive measures against environmental accidents in the future.

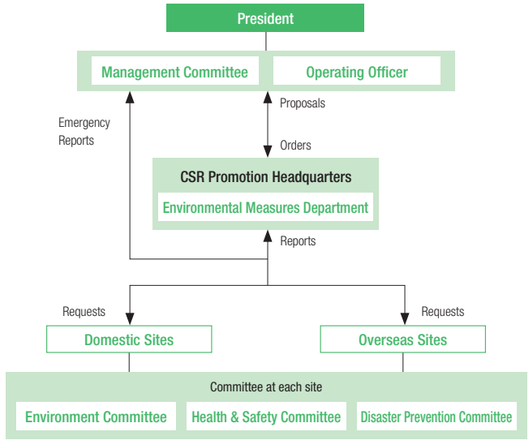
Environmental Training

We conduct various types of environmental training, such as general environmental training (once per year), ISO14001 training (regularly), waste management training (regularly), and emergency response training (during emergency response drills) to raise employee awareness of the environment and to maintain and improve our environmental management system.

Environmental Audits

Compliance evaluators work with managers of related departments to conduct environmental law compliance evaluations twice a year, in order to check that environment-related measurements and notifications have been carried out properly, that there are no problems, and that measures required by law have been taken. They also conduct internal audits once a year to confirm the effectiveness of ISO14001.

Environmental Organizational Chart



Environmental Footprint Material Balance

INPUT		OUTPUT	
Raw Materials	13,258 t	GHG (All domestic bases)	16,921 t-CO_2
Water Supply	460,919 m^3	Scope 1	3,129 t-CO_2
Energy		Scope 2	13,792 t-CO_2
Electricity	33,640 MWh	Drainage	456,310 m^3
City Gas	1,214 km^3	BOD	1 t
LPG	19 t	COD	2 t
A Fuel Oil	16 kl	Chemical Substances *PRTR Notification Targets	14.8 t
Kerosene	18 kl	Final Amount of Waste Disposed	0.9 t
Gasoline	87 kl	Amount Recycled	935 t
Light Oil	29 kl		
Chemical Substances *PRTR Notification Targets	853.7 t		

Intake/output diagram of Tochigi Segment, which accounts for the majority of all our Japanese bases

Environment

Greenhouse Gas Reduction

CORE PRINCIPLE	We track our energy usage and greenhouse gas emissions by taking quantitatively monitoring and measuring the environmental footprint caused by its business activities, and promote energy conservation and CO_2 emissions reduction activities to prevent or mitigate global warming.

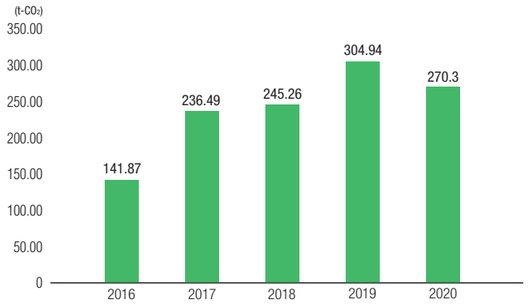
Reduction of greenhouse gas emissions (Scope 1, Scope 2)

We have improved work efficiency in its factories, upgraded machinery such as air conditioners and transformers, converted to LED lighting in offices and factories, and promoted other activities to save energy as part of its efforts to reduce greenhouse gas emissions. In FY2020, we reduced our greenhouse gas emissions by 270.3 t-CO_2.

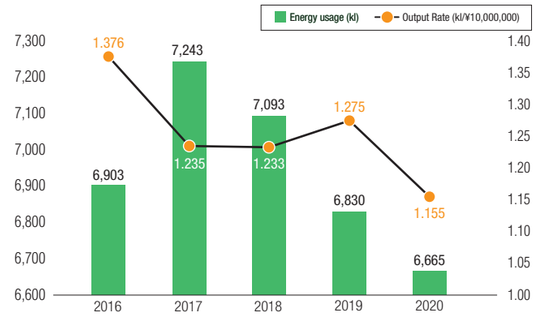
IMPROVEMENTS (Tochigi Segment)	PREDICTED ANNUAL POWER SAVINGS (kWh/year)
Conservation of energy of air compressors (fixing air leakage and improved use of devices to reduce air consumption)	9,017
Reduction in the use of standby mode (turning off power when local exhaust fans are not operating)	12,799
Conversion to LED lighting	45,641
Improving facilities (conversion to invertor of oil hydraulic pump and chiller circulation pump)	4,743
Conservation of energy by setting calendar timers on air conditioners	4,594
Stop operating sintering furnace on the weekend	161,089
Renewal of water-supply pump	811

*Figures in FY2020

Domestic Sites: Reducing greenhouse gas emitting activities



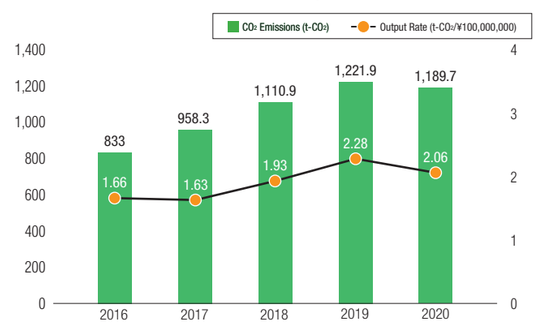
Domestic Sites: Energy usage and revenue output rate



Scope 3 Emissions

We calculate our annual consignment volume of cargo in Japan from the transport segment and distance for each product category, and monitor and report the items required by Scope 3 of the CDP (Carbon Disclosure Project). In FY2020, our emissions in Scope 3, Category 9 (downstream transport) of the CDP were 1189.7 t-CO_2. We also do monitoring of CO_2 emissions related to employee commutes. By aggregating truck packages used for product shipping, we are reducing CO_2 emissions in our transportation.

Domestic Sites: CO_2 emissions and revenue output rate



Waste Reduction/Recycling

CORE PRINCIPLE	We conduct waste reduction and recycling activities based on the principles of 3R (Reduction, Reuse, Recycling).

SMIC Group's Solder Recycling System

In cooperation with TAK-G, our affiliate company, we have been recycling solder for about 40 years. With the emergence of lead-free solder in the 2000s, an old era with two elements, tin and lead, into a new era with three elements, tin, silver, and copper. Today, we use more elements. Because of this development, it was required to install facilities to deal with multiple elements for recycling solder. As a result, we developed special technology that limited the emergence of hazardous materials to the absolute minimum and a solder recycling system that could reproduce high-purity solder in our own refining method. The importance of recycling solder is increasing nowadays, and the amount of recycling has doubled in the last few years, and this is expected to continue.

We assumed *responsibility as manufacturer* to meet stakeholders' expectation as material manufacturers when recycling minerals was not popular. We will continue to actively promote investment in human resources and technological innovation toward further development of a system in which we collect the used solder products of our company and recycle them and the realization of recycling solder with multiple elements in order to achieve a sustainable society with effective utilization of limited mineral resources and the control of air pollution.

Flow of the solder recycling system

❶ Collecting used solder and leftover solder material

We collect the paste solder leftover material and dross that emerged from soldering equipment (oxide formed by tin and lead in the solder) left after being used by our customers as well as leftover material from processes at SMIC.

❸ Reproduction as solder materials

All high-purity solder materials reproduced by TAK-G are returned to SMIC where they are processed to become various new products depending on usage.

❷ High-temperature reduction treatment and electrolytic refining treatment

Collected dross and paste solder leftover material are heated to a high temperature and collect solder with reduced oxide. For this process, we make efforts to prevent environmental pollution by developing and using an incineration furnace that restrained exhaust gas and hazardous materials in accordance with the Act on Special Measures concerning Countermeasures against Dioxins.

Some solder with high temperature reduction treatment contains multiple elements such as bismuth and nickel. In order to eliminate these and increase purity, we implement an electrolytic refining treatment to separate only the targeted metal on a stripping sheet by taking advantage of difference in ionization tendencies.

Incinerator for high temperature reduction treatment

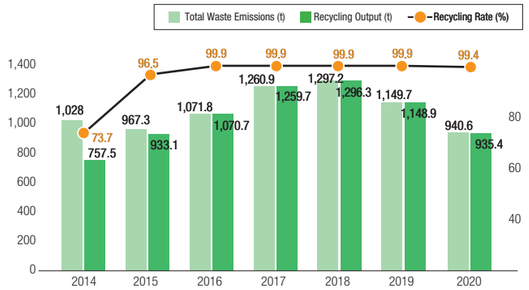
Electrolytic refining equipment

Environment

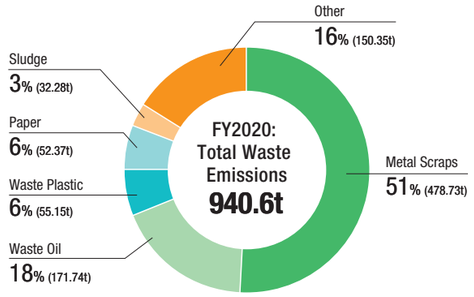
Efforts to reduce waste emissions

We made efforts to reduce waste emissions since 2013, such as recycling solder, collecting plastic byproducts, and recycling bearing product scraps. We have now achieved a recycling rate of 99% of waste.

Domestic Sites: Total Waste Emissions and Recycling Rates



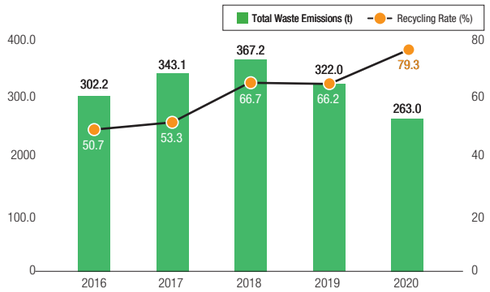
Domestic Sites: Breakdown of Waste Emissions



Overseas Site Data and Initiatives

We conduct environmental activities at its overseas sites and domestic sites alike based on four priority themes related to the environment (reducing greenhouse gases, reducing waste, reducing harmful chemicals, and nature conservation activities). This includes collecting and recycling product containers and packaging, as well as reducing power usage by managing operations of manufacturing equipment. We hold meetings with each overseas site once annually in order to ascertain their annual plan and initiatives, so we can promote initiatives aimed at environmental conservation suitable for their region and circumstances.

Overseas Sites: Total Waste Emissions and Recycling Rate



Reduction of harmful chemicals

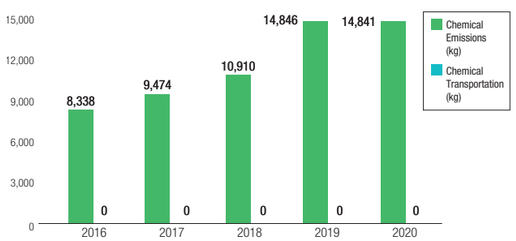
CORE PRINCIPLE

Our development, purchasing, manufacturing, and environmental departments manage chemical substances based on our environmental management system to protect our health and the environment and to realize safe and secure social life. In particular, per our plans we are implementing a reduction or prohibition of the use of chemicals that have a large environmental footprint. We also define reduction goals every year and make focused efforts.

Emissions and movement of PRTR law-specified chemicals

We comply with the PRTR law to track the amount of applicable substances we handle, emit, and transport.

Emissions and movement of PRTR law-specified chemicals



Soil and groundwater pollution countermeasures

We are taking the following initiatives as soil and groundwater pollution countermeasures. We also work to prevent pollution by conducting emergency response drills, as well as risk training to prevent leaks of polluted water.

Soil	Voluntary component analysis (once per year)
Water quality and groundwater	Final drain and groundwater inspections (chlorine residue, pH, etc. conducted daily) Component analysis and measurement of drain water and groundwater (conducted monthly)
Rainwater	Voluntary component analysis (twice per year)

Working with Customers

Securing the quality and safety of our products

CORE PRINCIPLE

We have defined a Quality & Safety Policy, and in order to enable customers to use our products with peace of mind, we strive to improve the quality of our products throughout the product lifecycle.

Quality and Safety Policy

1. We shall comply with related laws and regulations as well as customer demands, and improve customer satisfaction by supplying products and services with consideration for quality and safety.
2. We shall construct, implement, and maintain a quality management system in accordance with our established quality manuals, and continuously improve the effectiveness of this system.
3. We shall set quality policies and targets for activities, conduct regular reviews and as necessary, and evaluate opportunities for improvement (intervals, frequency, and circumstances) of the management system.
4. We shall evaluate the necessity of changes to our quality management system, and if changes are necessary, we shall review our system to maintain its adequacy in light of our management philosophy.

Obtained Quality Management System Certification

We have obtained the international standard ISO9001 at 21 manufacturing sites both in Japan and abroad. Additionally we have obtained the automotive industry quality management system certification IATF16949 at 16 sites in Japan and abroad.

Initiatives to Improve Quality

To eliminate defects in our deliveries, processes, and acceptences, SMIC has formulated annual quality activity plans and requires each business unit to set its own goals to work towards reducing defects. In case of a defect, we compile recurrence countermeasures, incorporate analysis results into our improvement plans for the following year, and make quality improvements continuously according to the PDCA cycle. We also give quality excellence awards to overseas factories that have made excellent achievements in order to elevate the level of quality of the entire group.

Initiatives to Improve CS

We are striving to drive CS (Customer Satisfaction) through working to improve our sales activities and technology innovation by making proposals to customers, engaging in joint development, participating in technology seminars and technology conferences, and exhibiting at exhibitions. These efforts have been highly evaluated, and in FY2020 we won the awards shown on the right.

Intel Supplier Continuous Quality Improvement Award

ROHM CO., LTD. Excellent Quality Award

Nissan Motor Corporation Certificate of Appreciation for Supplier Score Card Excellent Quality

Product Chemical Management

We conduct management of chemicals based on our environmental management system, in order to comply with the RoHS directives and REACH rules, which are European chemical regulation laws made to protect human health and the environment. We have laid out a dedicated team system and are complying with chemical inspections of our products.

Per REACH rules, we have completed full registration of the chemicals we handle and acquired SDS from our suppliers, in order to relay information to customers based on Articles 31 and 32. We supply customers with SDS & GHS labels, compliant with GHS (Globally Harmonized System of Classification and Labelling of Chemicals).

Quality Audits

We conduct internal quality audits twice per year in order to maintain IATF16949 certification, in both our solder division and bearings division at our Japanese manufacturing sites and sales locations including group companies. We also conduct regular quality audits once per year at all of our manufacturing sites both in Japan and abroad.

Preventing Quality Defects

We established our affiliate company Industrial Analysis Service (IAS) in 1972 for defect prevention purposes. As a third-party institution, IAS conducts inspection and analysis processes that are typically done internally. We decide pass or failure results based on the results of that analysis, which helps to prevent cheating and false pretenses in the inspection process.

Working with Suppliers

Procurement Activities

CORE PRINCIPLE

We comply with laws relating to procurement and automotive industry fair trade guidelines set forth by METI (the Japanese Ministry of Economy, Trade and Industry) in order to define the basic stance of our purchasing policy (practice fair and faithful procurement with an emphasis on respect for suppliers), as well as our CSR procurement policy when conducting procurement from suppliers.
Our basic stance toward our suppliers is to request they follow the requirements of IATF16949, ISO9001 and ISO14001, as well as item 14 of the supply chain assessment guidelines defined by the RBA such as observation of law and social norms and the promotion of a business continuity and recovery plan in case of emergency.
We will continue to observe procurement compliance and work towards establishing a safe and secure supply chain in order to contribute to society through procurement and build good relationships with our suppliers.

CSR Sourcing Policy

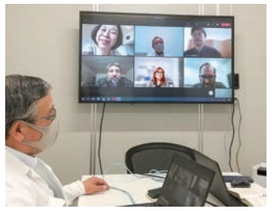
1	Senju Metal Industry Co., Ltd. "Quality and Safety Policy"
2	Senju Metal Industry Co., Ltd. "Environmental Policy"
3	Senju Metal Industry Co., Ltd. "Purchasing Policy"
4	Senju Metal Industry Co., Ltd. “Basic Stance Toward our Suppliers”
5	IATF 16949 requirements that must be considered for deliverables
6	Environmental management requirements that must be considered for deliverables

Basic Stance Toward our Suppliers

1	Compliance with laws and social norms
2	Consideration of human rights and labor
3	Consideration of Health & Safety
4	Prohibition of bribery and fair trade
5	Healthy business management
6	Provide quality, timely delivery, and a steady supply
7	Preparation for emergency and business continuity
8	Consideration for the environment
9	Promotion of responsible mineral procurement
10	Emphasis on VE (Value Engineering) activities
11	Emphasis on provision of information
12	Information security
13	Eliminating relationship with antisocial forces
14	Social contribution

CSR Procurement Initiatives

Our procurement departments and the related development and manufacturing departments conduct audits of suppliers both in Japan and abroad, according to yearly plans. In FY2020, as in previous years, our suppliers in Japan and abroad cooperated with our supply chain assessment, and no problems were found.
Even under the negative influence of COVID-19, we conduct online meetings with suppliers and endeavour to maintain close communication with them.



Initiatives in Responsible Mineral Procurement

In January 2011, we joined the RBA (Responsible Business Alliance), and have built close relationships with customers in the electronics industry. Since 2014, we have been a member of the RMI (Responsible Minerals Initiative), and have urged our refineries to submit to the RMAP (Responsible Minerals Assurance Process) and obtain third party certification. In February 2015, all of our supplier refineries received RMAP certification.
Moving forward, in order to conduct responsible mineral procurement as a means to address a wider range of risks than the conflict minerals we have addressed so far, we will call on all of our supplier refineries to renew their RMAP certification, with the aim of sustaining a safe and secure supply chain for SMIC products.

Responsible Business Alliance
Advancing Sustainability Globally

RESPONSIBLE MINERALS INITIATIVE

Working with Employees

Our Principle on Human Resources

CORE PRINCIPLE

We consider our employees to be important assets. In light of this, we respect the human rights and personality of each individual employee, and are striving to build workplace environments where a diverse range of human resources can realize their potential.

Respect for Human Rights

Basic policy on Human Rights and Labor

We define our policy and goals for human rights and labor in its Basic CSR Policy and Practical CSR Goals, respectively. Embracing the principles of Ability, Integrity, and Fighting Spirit noted in our management philosophy, we are striving to build an environment where employees can work enthusiastically. Based on the belief that harassment absolutely must not be tolerated, we conduct harassment prevention training to better educate our employees.

Fair Evaluation and Our Personal Statement System

We conduct human resource evaluations twice a year in order to apply the results to proper guidance for capacity development and human resource training. Through this process, we fairly and justly evaluate the work performance abilities of employees, and reflect our findings in promotions, raises, and bonuses. We have also established a personal statement system with the purpose of improving our workplace environments. Individual employees answer an annual questionnaire of what they think about and what they want from their jobs and workplace environments. Through these initiatives, we are working to make improvements that will enable employees to better fulfill their potential.

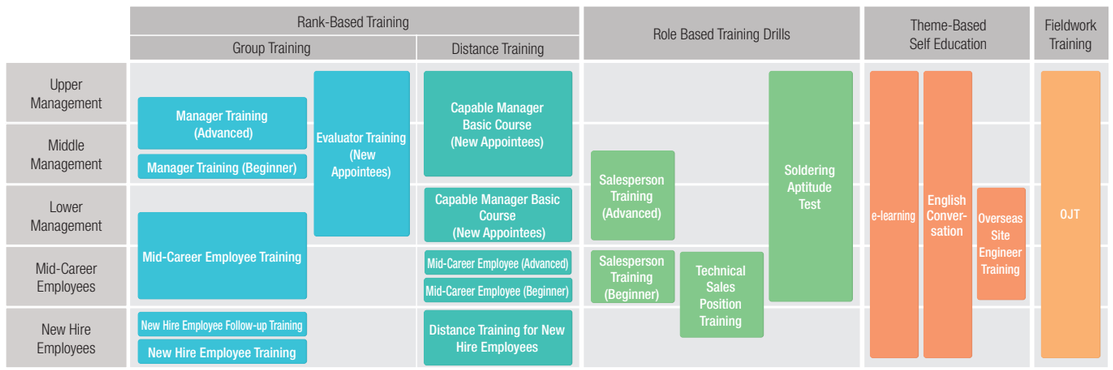
Human Resource Training

We encourage all employees to constantly work to obtain new knowledge, with the aim of cultivating professionals who are capable of making rational decisions from a broad perspective. We conduct appropriate training at every level and separate training for all employees, having examined effective methods based on training implementation regulations.
Since FY2020, we have conducted soldering aptitude tests with the purpose of improving quality and skill of soldering among employees. While such a program exists for employees, we aim to expand training to include a soldering school for our customers as well, as an effort to establish the new culture of SMIC Group firmly.

Soldering Aptitude Tests

Education Support System

We have established a scholarship fund grant program with the purpose of aiding employees as they advance to undergraduate or graduate university programs to obtain more advanced and sophisticated knowledge and skills. In order to encourage employees to engage in voluntary self-improvement and support them as they obtain more sophisticated skills and knowledge, we also offer Assistance for Acquiring Special Skills.



Working with Employees

Health & Safety

CORE PRINCIPLE	We have clearly stated the basic steps necessary to prevent workplace accidents, with the aim of enriching its health and safety activities. We have also established health and safety management regulations and a Health & Safety Policy, for the purposes of ensuring the health and safety of our employees, and promoting the formation of comfortable workplace environments.

Health & Safety Policy

1. We shall enrich our health and safety activities based on the Labor Standards Act and Industrial Safety and Health Act of Japan, in order to promote the formation of comfortable workplace environments.
2. The company shall establish a health and safety management system, and actively promote necessary measures though its organizations and managerial posts in order to prevent labor accidents.
3. Employees shall comply with the law and rules established by the company, and work to prevent labor accidents and promote maintenance of health.

Labor Health & Safety Management

Based on the law, we have established health and safety management systems according to the scale of each site. We prepare annual activity plans that define activity goals and priority activities, and conduct health and safety activities based on these plans.

Incidence of Serious Labor Accidents

We have kept our rate of labor accidents (accident rate) below the average for the entire Japanese manufacturing industry.

	FY2016	FY2017	FY2018	FY2019	FY2020
Accident Rate	0	0.47	0.49	0	0.92

*Rate of Labor Accidents: (Time off work accidents + No time off work accidents) / Total Working hours × 1,000,000

Safety Training

We regularly conduct the following training for employees, so that they can learn knowledge and skills relating to health and safety.

- Training at the time of hiring
- Education and training when responsibilities are changed
- Special training for employees doing hazardous or harmful work
- Foreman training (including refresher training for employees who have been in-training foreman for five years)
- Other health and training for supervisors
- Health and safety training to improve health and safety standards for employees doing hazardous or harmful work
- Training for qualified personnel (forklift drivers, etc.)

Health Maintenance

We conduct health examinations and has established a consultation counter in accordance with the law. In order to reduce the burden of personal injury and illness suffered by employees, we have established a system for employees to enroll in cancer insurance at the company's expense. We also have a system for the company to bear part of medical expenses incurred at a medical institution for one month. This helps to relieve the individual burdens for employees.

Support Suited to Each Workplace

At our factories, we supply employees with salt-fortified foods as a preventive measure against heat stroke in summer, and also milk as a health measure, in order to maintain their health and to support their ability to work safely.

Various Systems		Frequency/Period	Details
Health Management	General Health Examinations	1 time/year	Implementing general health or lifestyle-related disease medical examinations for employees Implementing guidance on lifestyle improvements for those who desire it.
	Lifestyle-related Disease Medical Examination	2 times/year	
	Special Health Examination	2 times/year	We conduct health examinations with special items for employees engaged in hazardous work as stipulated by law.
	Stress Checks	1 time/year	Complete questionnaires and offer advice to encourage individual mental health care awareness and lifestyle changes.
Welfare	Cancer Insurance System	25 years old or older	The company pays the insurance premiums for employees 25 years of age or older who enroll in cancer insurance, thereby reducing the burden of unexpected cancer-related diseases on employees.
	Medical Expense Reimbursement System	As needed	The company bears part of the cost of medical insurance required for treatment of illness and injury suffered by employees in their private lives.
Other	Consultation Office	Any time	Workplace and job counseling with vocational counselors.

Making Worker-Friendly Workplaces

CORE PRINCIPLE	We are working to build workplace environments where employees can work energetically, such as by providing support for work/life balance and conducting activities to improve the welfare and mutual kinship of employees. In addition, we have taken various measures and made improvements so that employees can work with peace of mind, such as reducing and managing long working hours by tracking working hours and hours in the office with an employee attendance system.

Supporting Work/Life Balance

We have established childcare leave and family care leave systems based on the Child Care and Family Care Leave Act, so that employees can maintain work/life balance and work with peace of mind. We have also taken measures to reduce prescribed working hours at the request of employees. This system is in fact used by employees who have small children so that they can balance childcare with their career.

Welfare and Social Interaction For Employees

Our in-house organization *Senyukai* holds group and recreational activities with the purpose of encouraging social interaction among employees. We have also established a Labor Committee with the purpose of improving workplace environments and ensuring safety at work as the representative of employees. This committee actively contributes to realizing safe, worker-friendly workplaces and the development of the company.

Experience event of getting bamboo shoots sponsored by Senyukai on the premises of Kinugaoka Factory,

Diversity

CORE PRINCIPLE	We respect the diversity of differences between individual employees, such as ethnicity, gender, work history, age, values, family structure, and lifestyle. By utilizing these differences, we can effectively adapt to the constantly changing business environment and diversifying needs of customers, and believe in the potential of each individual employee so that they can demonstrate their abilities. In order to make this possible, we are addressing diversity, with the aim of *realizing workplaces where employees feel happy, can stay longer, and do rewarding work with peace of mind.*

Promoting Advancement of Women

We have formulated a general entrepreneur action plan based on the Act on Promotion of Women's Participation and Advancement in the Workplace, and is working to promote the advancement of women.

Training & Seminars

We regularly host training and seminars according to the needs and circumstances to promote the ambition of our employees.

Employment of Disabled People

We have long worked to employ disabled people, and has developed workplace environments where people with disabilities can work enthusiastically and with peace of mind.

Hosting Diversity Study Groups

At diversity study groups, we set themes each time with a focus on *differences among employees* and have the participants speak with each other about their experiences and circumstances. This allows participants to share their own ideas, advice, and efforts, so they can make *new discoveries*. These study groups also offer a chance to build more worker-friendly environments and allow for deeper mutual understanding between employees and between the company and employees. In FY2020, exploiting COVID-related movement restrictions to our advantage, we were able to hold study meetings across offices by utilizing the TV conference system. These diversity study groups held six meetings, with a total of 55 participants, exchanging opinions on hardships and efforts on telework employees and employees who are currently bringing up children.

Working with Employees

Employee Data

	FY2016	FY2017	FY2018	FY2019	FY2020
Employees					
In Japan	1,584	1,694	1,731	1,747	1,761
Overseas	601	643	627	631	596
Total *Numbers in parentheses are the ratio of women	2,185 (37.3%)	2,337 (35.0%)	2,358 (36.0%)	2,378 (36.8%)	2,357 (37.5%)
Regular Employees					
Male	—	—	1,233	1,242	1,201
Female	—	—	569	533	530
Contract Employees					
In Japan	—	—	518	488	468
Overseas	—	—	38	115	158
Total *Numbers in parentheses are the ratio of women	—	—	556 (50.2%)	603 (56.6%)	626 (56.4%)
Managers (In Japan)					
Male	104	100	105	116	119
Female	5	5	6	7	9
Ratio of Female Managers	4.59%	4.76%	5.41%	5.69%	7%
Managers (Overseas)					
Male	—	—	—	74	47
Female	—	—	—	42	38
Ratio of Female Managers	—	—	—	36.21%	44.7%
Recruiting Situation					
Male	34	44	79	47	23
Female	14	16	23	18	19
Total	48	60	102	65	42
Turnover (3 years after hiring)	20.8%	10.0%	15.6%	16.9%	17.59%
Various Leave Systems					
Average Days of Paid Leave Taken / Year (Days)	8.65	7.4	9.8	8.5	9.08
Average Rate of Paid Leave Taken	57.50%	59.41%	62.63%	62.49%	58.2%
Employees Taking Child Care Leave	11	8	12	10	22
Return Rate After Child Care Leave	100%	100%	91.70%	100%	100%
Employees Taking Family Care Leave	0	3	1	0	1
Return Rate After Family Care Leave	100%	33%	100%	100%	100%
Labor Hours					
Average Overtime Hours / Month (hours)	14.2	13.7	15.6	14.4	9.03
Employment of Disabled People					
Number of Disabled Employees	21	18	17	16	16
Ratio of Disabled Employees *Numbers in parentheses are the legal employment ratios	2.6% (2.0%)	2.2% (2.0%)	2.2% (2.2%)	2.1% (2.2%)	2.02% (2.3%)

Activities of Social Contribution

Natural Environment Protection

Arakawa waterfront supporters

Headquarters | 2020.11.7 | 6 people

Moka environment partnership meeting

Tochigi Segment | four times/per year | 67 people

Conservation of Satoyama [an area where farmland meets the forest] Volunteer

Kansai Segment | 2020.6.28 | 5 people

Co-sponsoring a grouse protection fund

Senju System Technology Co., Ltd. | 2021.3.16

Kureha Hillside Bamboo Forest Maintenance Volunteer

Senju System Technology Co., Ltd. | 2020.11.1

Donation of recycled materials to city hall

Senju Solder (Phils.) Inc. | 2021.1.30

Activities of Social Contribution

Culture / Education / Community Outreach

Providing solder materials for industrial arts at junior high school

Headquarters | 2020

Co-sponsoring illumination operations around the East exit of Yatsuka Station

Soka Segment | 2020.12.6

Book donations for children in poor areas

Senju Metal (Shanghai) Co., Ltd. | 2020.12.24

Co-sponsoring COVID-19 support event

Senju（Thailand）Co.,Ltd. | 2020.5.3. | 10 people

Co-sponsoring an illumination event

Koriyama Sales Office | 2020.11.13

Co-sponsoring the kids dance of Kumano Shrine

Senju System Technology Co., Ltd. | 2020.8.25

Donation to an organization for people with disabilities

Senju Electronic (Taiwan) Co., Ltd. | 2020.3.28

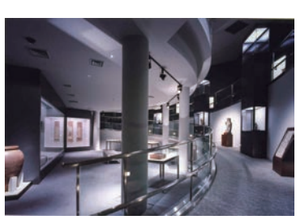
Donation to organization supporting women

Senju Electronic (Taiwan) Co., Ltd. | 2020.11.13

Sekido Museum of Art

Sekido Museum of Art inside the SMIC headquarters building was established by the Sato Artcraft Research & Scholarship Foundation in April 2006, with the purposes of promoting cultural exchange and mutual understanding between countries and refining culture in Japan, both through arts and crafts. Works in the museum's possession were built up from the collection of the late Honorary Chairman Senju Sato, and the museum's name *Sekido* is in fact the alias of Mr. Sato himself.

Sekido Museum of Art conducts activities to help everyone in the community enjoy fine art, including special exhibits with a focus on works in the museum's collection, such as Concert in the Museum events.



Myoko Cafe

The Adachi-ku organization for people with disabilities *Yu-Ai Kai** operates cafés and shops at various facilities in Adachi-ku, Tokyo and provides people with disabilities with places to work every day. *Myoko Café* located in a corner of the main office of SMIC is one of them accepting people with intellectual disabilities using the Adachi-ku welfare facilities for people with disabilities. We provide them with opportunities to connect with society through work. The Jobs at *Myoko Café* increases their opportunities to move around on public transport for themselves. We support them in fostering positive and independent characteristics by doing each and every detailed operation such as exchanging messages over the telephone, café operations, and bread sales and to acquire more sophisticated social skills. SMIC affirms the activities. Since 2005 when the former mail office building was rebuilt into the current one, we have been supporting their activities by providing the café space, paying for their utility costs, and ordering drinks when we have internal meetings.

*This is an organization established about 40 years ago. Its aims are for groups of families of those who have impaired eyesight, hearing impairment, trouble in arms and legs, intellectual disabilities, and who became disabled in the middle of their lives due to accidents or illnesses come together to understand each other's disabilities, to promote sociability, and to provide places to work.

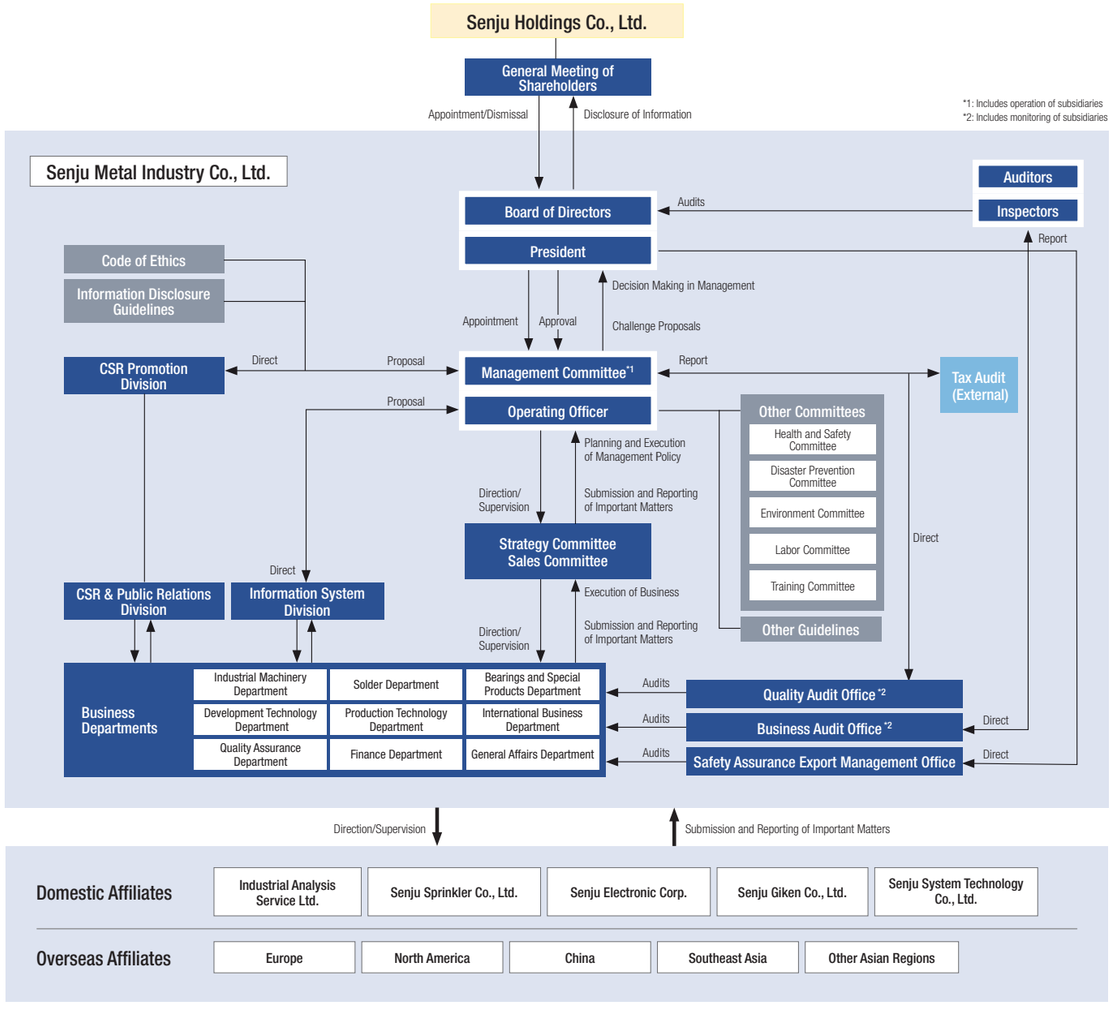
Governance

Corporate Governance

BASIC POLICY	We will develop and operate its management system and construct its corporate governance system, while maintaining sound, fair, and highly transparent management, and adapting to the changing times. The basic policy of the group is to fulfill its explanation responsibilities by disclosing information in a fair manner to all stakeholders.

Corporate Governance System

We are working to augment our governance through our meetings of shareholders and board of directors based on the law, as well as by assigning corporate auditors, inspectors, and tax auditors, and by developing the CSR Promotion Headquarters, Management Committee, and Strategy Committee.



Board of Directors and Business Execution System

Board of Directors

The Board of Director consists of 5 directors, 1 corporate auditor, and 1 inspector. It follows relevant laws and regulations as well as the Articles of Incorporation to appoint or dismiss executive officers and make resolutions on the agenda from the Management Committee, as the final decision-making body of SMIC business management. We have established ethical regulations and information disclosure regulations, which are defined separately as indicators for deliberations and decisions by the Board of Directors.

Management Committee

The Management Committee consists of directors and executive officers. It deliberates on legal matters and determines or approves important matters in the execution of business. It also submits matters related to business execution to the Board of Directors that should be deliberated or decided by the Board of Directors.

We have established various other regulations, BCP management regulations, crisis management regulations, and information security regulations, which are defined separately as indicators for deliberations and decisions by the Management Committee.

Executive Officer System

We have introduced an executive officer system, and the executive officer general managers appointed by the Board of Directors manage the division of duties among departments they are in charge of. Based on the business plan of the company, they formulate and execute the business plan of the departments they are in charge of. As officers in charge, they give direct orders on important matters in guidance of the department they are in charge of.

Audit Supervision System

Auditors and Inspectors

We have appointed one auditor and one inspector. These officers carry out audits of daily management activities, including the execution of duties by directors.

Corporate auditors and inspectors attend the Board of Directors, where they fulfill their duty to prevent illegal or exceedingly unjust resolutions from being made, as well as to ensure the conduct of activities according to the law.

Introduction to Directors, Auditors, and Executive Officers

	Name	Operating Officer	Board of Directors	Management Committee
President	Ryoichi Suzuki		○	○
Representative Director	Tomohide Hasegawa	○	○	○
Executive Director	Yuji Kawamata	○	○	○
Board of Director	Yuka Sato	○	○	○
Board of Director	Tetsuya Okuno	○	○	○
Corporate Auditor (External)	Shoju Sato		○	
Inspector	Kazutoshi Sakaguchi		○	○
Counselor	Motoyuki Ohtake	○		○
Counselor	Yasuhiro Ishii	○		○
Counselor	Setsuo Tanaka	○		○
Deputy Director	Toshimaru Sumiyashiki	○		○

Compliance

CORE PRINCIPLE	We consider our philosophy of management to be essential to compliance, and so has defined its basic compliance policy and practical goals based on the Basic CSR Policy. We have also explicitly stated the importance of compliance in our employee work rules. Employees faithfully follow these policies, goals, and rules, and work to maintain order within the company. The SMIC Group's Basic CSR Policy and Practical CSR Goals serve operate our companies in compliance with fair trade ethical principles.

Status of Compliance Activities

We conduct various types of training (CSR training, environmental training, procurement policy for supplier training, safety assurance export management training), as well as internal audits, and audits of suppliers in order to comply with various laws relating to business activities. In our internal audits, the Business Audit Department conducts several different audits of sites both in Japan and overseas, for the purpose of maintaining sound corporate compliance. This includes safety assurance export audits based on the Foreign Exchange and Foreign Trade Act, CSR audits based on the RBA code of conduct, and information security audits of the handling of confidential information at all sites both at home and abroad. In FY2020, we implemented a remote audit at domestic sites including our group companies as a measure under COVID-19. Each business unit quickly takes the corrective measures recommended in each audit in order to make continuous improvements to our management system.

FY2020 Audits

(unit: the number of actual cases)

Audit Target	Business Audits	Safety Assurance Export	Specified Shippers
Senju Metal Industry	67	35	17
Group Companies (in Japan)	33	3	3
Group Companies (Overseas)	0	0	0
Committees, etc.	0	0	0
Total	100	38	20

Established an Internal Reporting Hotline System (Smile Mail)

We have established a dedicated internal reporting hotline (Smile Mail) to discover misconducts and take corrective actions early on, which enables employees to anonymously report and consult about problems involving all employees' human rights (harassment, etc.) and problems involving compliance (violations of laws and internal regulations, problems with corporate ethics and social norms, etc.).

Governance

Risk Management

PRINCIPLE AND RISK MANAGEMENT SYSTEM	As a matter of responsibility for a company located upstream on its supply chain, we have assumed all manner of risks listed below. In response to this, we have established dedicated business units and committees to respond to each risk and are taking measures to prevent risks and minimize losses.

Possible risks

*Natural disasters such as earthquakes and typhoons;
*Infectious diseases such as the novel influenza and COVID-19;
*Information security risks such as information leaks and unauthorized access;
*Export management risks including safety assurance trade;
*Intellectual property risks such as patent infringement and technology leakage;
*Environmental risks such as climate change problems and waste contamination;
*Risks concerning human rights and labor such as harassment etc.

Initiatives Toward Business Continuity

We conduct evaluations, analysis, and countermeasures of various risks to keep damage to a minimum, build up our risk management in order to enhance the potential for continuity of business, implement a system to promote rapid recovery of important business, and formulate various plans such as our *Plan For Recovery of Equipment After Disasters.* We are also augmenting our backup system, so that when there is a site experiencing extreme difficulty with production due to a disaster or other emergency, we can continue production in collaboration with other sites in Japan and overseas.

Regular Emergency Drills

We conduct evacuation drills, firefighting drills, and first aid courses (AED courses) with guidance from fire departments and security companies, in order to protect the life and limb of employees from disasters such as earthquakes and fires.

We also participate in comprehensive fire drills conducted by fire departments with jurisdiction, in an effort to strengthen collaboration with local communities.

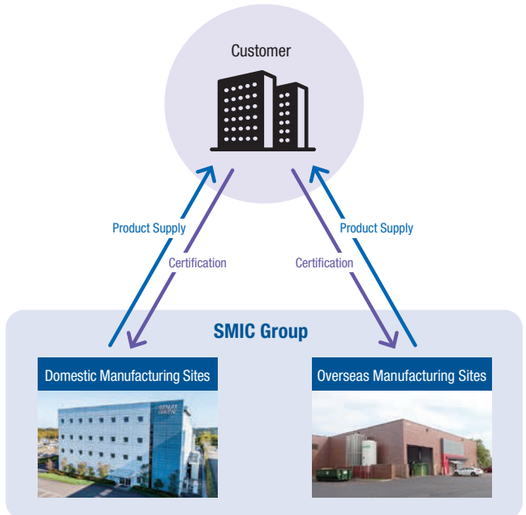
First aid courses (AED courses)

Company Secret Management / Personal Information Protection

We have established Corporate Secret Management Regulations and Personal Information Management Regulations, and is working to prevent leaks of confidential information by managing personal information held by the company, as well as the information of customers and suppliers.

Also, we act appropriately to laws and regulations including the EU GDPR (European Union General Data Protection Regulation).

Production backup system to ensure stable supply



Information Security

In light of damages suffered due to cyber attacks in recent years, we are further augmenting management and operation of information security. Our Information Security Department formulates basic action plans, and we are improving our capability to detect threats and take adequate backups to ensure that we can contain damages that do occur and recover quickly. Methods of cyber attacks change on a daily basis, so we conduct regular training about rules and threats for employees, and raise awareness of the importance of information security.

Safety Assurance Export Management

We acknowledge problems such as the proliferation of weapons of mass destruction, preventing excess accumulation of conventional weapons, and trade wars between countries. In response, we have placed restrictions on exports to maintain order in states of tension and comply with laws for maintaining international peace and safety, as well as upholding the Foreign Exchange and Foreign Trade Act. In order to implement export management, we have appointed the president of the company as the person in charge of safety assurance export management and established the Safety Assurance Export Management Office under the president's purview, and thus developed and enriched our export management system. We also implement audit of each business unit by self-check.

CLASSIFICATION
The Development Department classifies items by checking against a cargo list (export regulation list) regulated by export control-related laws including the Foreign Exchange and Foreign Trade Act.

TRADE INSPECTIONS
The Sales Department checks applications and end users of exported cargo

SHIPMENT MANAGEMENT
When shipping using logistics, we check that classification and trade inspections are complete, and confirm that cargo upon deliery matches the shipping cargo and leave documentation.

By making notifications on regulations and training, and conducting internal audits once pear year, we maintain regulatory compliance, and have achieved recognition from METI (Ministry of Economy, Trade and Industry) as a company that has developed a voluntary management system for safety assurance trade management.

*From "Official Announcement of Companies Producing Export Management Internal Regulations"
https://www.meti.go.jp/policy/anpo/compliance_programs_pdf/20210401_kouhyougenkou.pdf

Safety Assurance Export Management Training

We conduct classification and trade inspections, as well as training on safety assurance export management for employees in charge of shipment management. (FY2020: Conducted at 40 business units.) We also conduct training for top management, produce training materials that easily explain relevant laws, and provide training to various business units.

Intellectual Property

We make effective use of our intellectual property system for the products and technologies produced everyday by our development and manufacturing divisions, ensuring appropriate security of rights and confidentiality. While respecting others' intellectual property rights, we are committed to developing our original technologies.

Through these activities to support our business, we make further contributions to a sustainable environmental society.

Patents etc. Held

We secure, maintain, and control intellectual property rights for the purpose of protecting and increasing the value of the SMIC brand.

(As of May 2021)

PATENTS		TRADEMARKS	
In Japan	Overseas	In Japan	Overseas
515	1,690	113	421

Intellectual Property Education

We regularly host study sessions primarily for the Technology Development Department, take practical initiatives focused on the patent system, know-how management, and patent searches, and are working to improve management of product development and manufacturing risks.

COMPANY PROFILE

SENJU METAL INDUSTRY CO., LTD. / SMIC GROUP

DUNS# 690663091

ESTABLISHED	April 15, 1938
HEADQUARTERS ADDRESS	23 Senjuhashidocho, Adachi-ku, Tokyo 120-8555
PRESIDENT	Ryoichi Suzuki

BUSINESS SCALE

REVENUE(CONSOLIDATED)	¥78,424 million (April 1, 2020 - March 31, 2021)
CAPITAL (SIMPLE)	¥400,000,000
EMPLOYEES (CONSOLIDATED)	2,357 (As of March 31, 2021)

BUSINESS PORTFOLIO

- Smelting, alloying, casting, and expansion of metals, manufacture and sale of processed goods
- Manufacture and sale of metal powders and bearings
- Manufacture and sale of solvents and adhesives for soldering
- Manufacture and sale of soldering equipment
- Manufacture and sale of fire extinguishing equipment (affiliated company business)
- Manufacture and sale of machinery related to the above businesses
- Internal dispatch business

Headquarters

Segments in Japan


Tochigi Segment Matsuyama Factory


Tochigi Segment Kinugaoka Factory


Soka Segment

Kansai Segment Nishiwaki Factory

LIST OF MAJOR AFFILIATED COMPANIES

JAPAN

Industrial Analysis Service Ltd.
Senju Sprinkler Co., Ltd.
Senju Electronic Corp.
Senju Giken Co., Ltd.
Senju System Technology Co., Ltd.

AMERICA

Senju America Inc.
Senju Comtek Corp.
Senju Fire Protection Corp.

EUROPE (GERMANY, CZECHIA)

Senju Metal Europe GmbH
Senju Manufacturing Europe s.r.o..

ASIA

Senju (Malaysia) Sdn. Bhd.
Senju Trading (M) Sdn. Bhd.
Senju (Thailand) Co., Ltd.
Senju Solder (Phils.) Inc.
Beijing Senju Electronic Materials Co., Ltd.
Beijing Senju Fire Fighting Equipment Co., Ltd.
Senju Metal (Tianjin) Co., Ltd.
Shanghai Senju Business Management Consulting Co., Ltd.
Senju Metal (Shanghai) Co., Ltd.
Senju Metal (Huizhou) Co., Ltd.
Senju Metal (Hong Kong) Limited
Senju Electronic Materials (Hong Kong) Co., Ltd.
Senju Electronic (Taiwan) Co., Ltd.
Senju Metal Industry Co., Ltd. Kaohsiung Branch
Senju Metal Korea Co., Ltd.

Affiliated Companies in Japan


Industrial Analysis Service Ltd.


Senju Sprinkler Co., Ltd.

Senju Electronic Corp.


Senju Giken Co., Ltd.

Senju System Technology Co., Ltd.